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In the claims:

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Please cancel claim 103 without prejudice and add new claims 115-A96 & ECEIVED follows.

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- 113. An isolated or recombinant polypeptide comprising an amino acid sequence having at least 60 percent sequence identity with SEQ ID NO: 764, wherein said sequence identity is determined by the BLASTP algorithm, or by
- (1) aligning the amino acid sequence with SEQ ID NO:764 to identify the number of matching positions shared by the amino acid sequence and SEQ ID NO:764,
- (2) dividing the number of matching positions by the total number of amino acids in SEQ ID NO:764, and
 - (3) multiplying the dividend by 100.
- 114. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 70 percent sequence identity with SEQ ID NO: 764.
- 115. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 80 percent sequence identity with SEQ ID NO: 764.
- 116. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 90 percent sequence identity with SEQ ID NO: 764.
- 117. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 95 percent sequence identity with SEQ ID NO: 764.
- 118. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 98 percent sequence identity with SEQ ID NO: 764.
- 119. The isolated or recombinant polypeptide of claim 113 comprising an amino acid sequence having at least 99 percent sequence identity with SEQ ID NO: 764.

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- 120. An isolated or recombinant polypeptide comprising an amino acid sequence encoded by a nucleotide sequence which hybridizes under stringent conditions to the complement of a nucleotide sequence encoding SEQ ID NO: 764.
- 121. An isolated or recombinant polypeptide of any one of claims 113-120, which is an *H. pylori* polypeptide.
- 122. An isolated or recombinant polypeptide of any one of claims 113-120 which is an isolated polypeptide.
- 123. An isolated or recombinant polypeptide of any one of claims 113-120 which is a recombinant polypeptide.
- 124. An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 764.
- 125. An isolated immunogenic polypeptide comprising at least 5 consecutive amino acid residues of SEQ ID NO: 164.
- 126. The isolated immunogenic polypeptide of claim 125 comprising at least about 10 consecutive amino acid residues of SEQ ID NO: 764.
- 127. The isolated immunogenic polypeptide of claim 125 comprising at least about 12 consecutive amino acid residues of SEQ ID NO: 764.
- 128. The isolated immunogenic polypeptide of claim 125 comprising at least about 16 consecutive amino acid residues of SEQ ID NO: 764.
- 129. The isolated immunogenic polypeptide of claim 125 comprising at least about 20 consecutive amino acid residues of SEQ ID NO: 764.

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- 130. The isolated immunogenic polypeptide of claim 125 comprising at least about 50 consecutive amino acid residues of SEQ ID NO: 764.
- 131. The isolated immunogenic polypeptide of claim 125 comprising at least about 100 consecutive amino acid residues of SEQ ID NO: 764.
- 132. A fusion protein comprising an isolated or recombinant polypeptide of any one of claims 113-120, operably linked to an additional amino acid sequence.
- 133. The fusion protein of claim 132, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.
- 134. A fusion protein comprising an isolated or recombinant polypeptide claim 121, operably linked to an additional amino acid sequence.
- 135. The fusion protein of claim 134, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.
- 136. A fusion protein comprising an isolated polypeptide of claim 122, operably linked to an additional amino acid sequence.
- 137. The fusion protein of claim 136, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide.
- 138. A fusion protein comprising a recombinant polypeptide of claim 123, operably linked to an additional amino acid sequence.
- 139. The fusion protein of claim \\ 38, wherein the additional amino acid sequence comprises an *H. pylori* polypeptide\
- 140. A fusion protein comprising an immunogenic polypeptide of any one of claims 125-131, operably linked to an additional amino acid sequence.

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- The fusion protein of claim 140, wherein the additional amino acid sequence comprises an H. hylori polypeptide.
- A composition comprising isolated immunogenic polypeptides, wherein at 142. least one of the isolated immunogenic polypeptides comprises at least about 10 consecutive amino acid residues of SEQ ID NO:764.
- The composition of claim 142, wherein the at least one isolated 143. immunogenic polypeptide comprises at least about 12 consecutive amino acid residues of SEQ ID NO: 764.
- The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 16 consecutive amino acid residues of SEQ ID NO: 764.
- The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 20 consecutive amino acid residues of SEQ ID NO: 764.
- The composition of claim 142, wherein the at least one isolated 146. immunogenic polypeptide comprises at least about 50 consecutive amino acid residues of SEQ ID NO: 764.
- The composition of claim 142, wherein the at least one isolated immunogenic polypeptide comprises at least about 100 consecutive amino acid residues of SEQ ID NO: 764.
- A composition of any one of claims 142-147, further comprising a pharmaceutically acceptable carrier.

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149. A composition comprising an isolated or recombinant polypeptide of any one of claims 113-120 and a pharmaceutically acceptable carrier.

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- 150. A composition comprising an isolated or recombinant polypeptide of claim 121 and a pharmaceutically acceptable carrier.
- 151. A composition comprising an isolated immunogenic polypeptide of any one of claims 125-131 and a pharmaceutically acceptable carrier.
- 152. An immunogenic composition comprising an effective amount of an isolated or recombinant polypeptide of any one of claims 113-120.
- 153. An immunogenic composition comprising an effective amount of an isolated or recombinant polypeptide of claim 121.
- 154. An immunogenic composition comprising an effective amount of an isolated immunogenic polypeptide of any one of claims 125-131.
- 155. A vaccine composition comprising an effective amount of an isolated or recombinant polypeptide of any one of claims 113-120.
- 156. A vaccine composition comprising an effective amount of an isolated or recombinant polypeptide of claim 121.
- 157. A vaccine composition comprising an effective amount of an isolated immunogenic polypeptide of any one of claims \25-131.
- 158. A method of treating a subject for *M. pylori* infection comprising administering to the subject a composition of claim\142.
- 159. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 149

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- 160. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 150.
- 161. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 151.
- 162. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 152.
- 163. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 153.
- 164. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 154.
- 165. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 155.
- 166. A method of treating a subject for *H. pylori* infection comprising administering to the subject a composition of claim 156.
- 167. A method of treating a subject for H. pylori infection comprising administering to the subject a composition of claim 157.
- 168. The method of claim 158, wherein the treatment is a prophylactic treatment.
- 169. The method of claim 159, wherein the treatment is a prophylactic treatment.

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- The method of claim 160, wherein the treatment is a prophylactic 170. treatment.
- The method of claim 161, wherein the treatment is a prophylactic 171. treatment.
- The method of claim 162, wherein the treatment is a prophylactic 172. treatment.
- The method of claim 163, wherein the treatment is a prophylactic **173**. treatment.
- 174. The method of claim 104 wherein the treatment is a prophylactic treatment.
- The method of claim 165, wherein the treatment is a prophylactic treatment.
- The method of claim 166, wherein the treatment is a prophylactic 176. treatment
- The method of claim 167, wherein the treatment is a prophylactic 177. treatment.
 - 178. The method of claim 158, wherein the treatment is a therapeutic treatment.
 - 179. The method of claim 159, wherein the treatment is a therapeutic treatment.
 - The method of claim 160, wherein the treatment is a therapeutic treatment. 180.
 - The method of claim 161, wherein the treatment is a therapeutic treatment. 181.

- The method of claim 162, wherein the treatment is a therapeutic treatment. 182.
- The method of claim 163, wherein the treatment is a therapeutic treatment. 183.
- The method of claim 164, wherein the treatment is a therapeutic treatment. 184.
- The method of claim 165, wherein the treatment is a therapeutic treatment. 185.
- The method of claim 166, wherein the treatment is a therapeutic treatment 186.
- The method of claim 167, wherein the treatment is a therapeutic treatment. 187.
- A method of producing a pacine composition comprising substantially purifying a polypeptide of any one of claims 113-120, and formulating a vaccine composition comprising the polypeptide.
- A method of producing a vaccine composition comprising substantially purifying a polypeptide of claim 121, and formulating a vaccine composition comprising the polypeptide.
- A method of producing a vaccine composition comprising substantially purifying a polypeptide of any one of claims 125-13 h, and formulating a vaccine composition comprising the polypeptide.
- 191. A method of producing an immunogenic composition comprising isolating a polypeptide comprising at least 5 consecutive amino acid residues of SEQ ID NO: 764 and formulating a vaccine composition comprising the polypeptide.
- The method of claim 191, wherein the isolated\polypeptide comprises at 192. least about 10 consecutive amino acid residues of SEQ ID NO.\ 764.